

# WPC1000 & WPC2000

## Wireless Phase Comparator Kits



WPC1000

### Features:

- Automatic alarming above threshold voltage as default
- 11kV / 33kV Voltage Range for WPC1000
- 66kV / 132kV Voltage Range for WPC2000
- Positive Indication of phase relationship
- 50m operating range in free air
- Built in self-check facility
- 433.9mHz operating frequency
- Shock and drop resistant
- High impact ABS body
- -25°C to +55°C operating temp range
- Indoor/Outdoor use regardless of weather conditions
- Easy access for battery replacement
- Built in self-check facility
- Self Proving facility
- Various rod adaptors available

The WPC1000 & WPC2000 Wireless Phase Comparator kits utilize a Transmitter module and a Receiver module to determine the Phase Relationship between two energized conductors at the same nominal voltage and frequency, eliminating the need for connecting cables. Kits are designed to comply with IEC 61481 standards for system voltages up to 132kV.

The Transmitter (TX) and Receiver (RX) modules are battery-operated electronic contact devices that provide a clear visible indication of the line's status. They utilize super bright LED lights and a high-intensity buzzer to accurately determine the phase relationship between two points at the same nominal voltage and frequency. This ensures clear indication, even in challenging conditions such as bright sunlight and high background noise.

During voltage checking, the Transmitter unit establishes contact with the live conductor. If the conductor's voltage exceeds the threshold, the Transmitter triggers and initiates the automatic voltage checking sequence. If the line remains live after 5 seconds, both RED LEDs illuminate solid, and the Line Phase Angle transmits to the Receiver.

Similarly, the Receiver Unit performs Voltage Checking by making contact with the live conductor. If the voltage exceeds the threshold, the Receiver activates and starts the voltage checking sequence. If the line remains live after 5 seconds, the RED LED lights up solidly.

Furthermore, to determine the phase angle shift between the Transmitter and Receiver, certain conditions are considered. An IN PHASE Condition indicates a phase angle shift nominally  $\leq \pm 10^\circ$ , shown by solid RED and GREEN LEDs and a continuous buzzing sound. However, an OUT OF PHASE Condition indicates a phase angle shift nominally  $> \pm 20^\circ$ , represented by a solid RED LED.

Please note that each module requires suitable insulating operating rods for safe distance from the HV source to ensure optimal performance.



WPC2000